FIG. 1

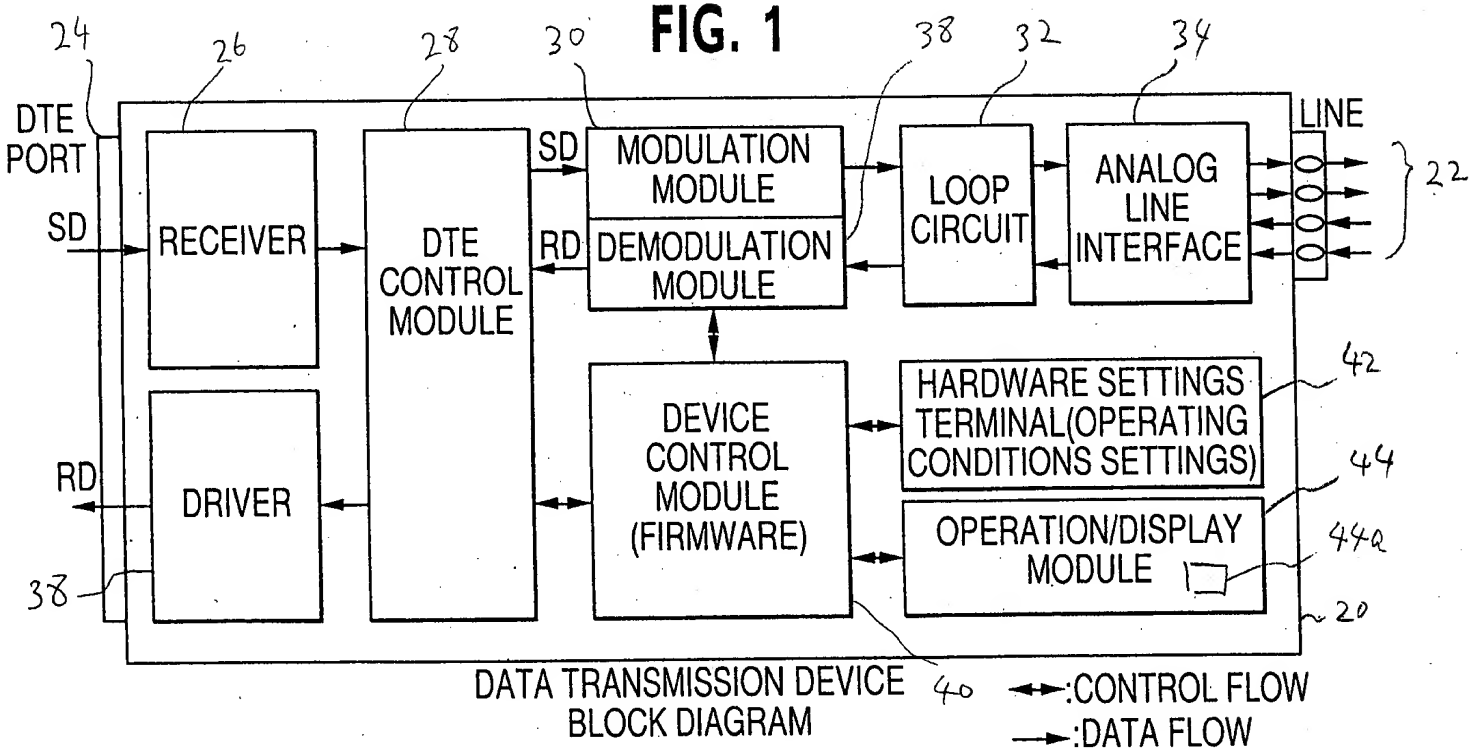
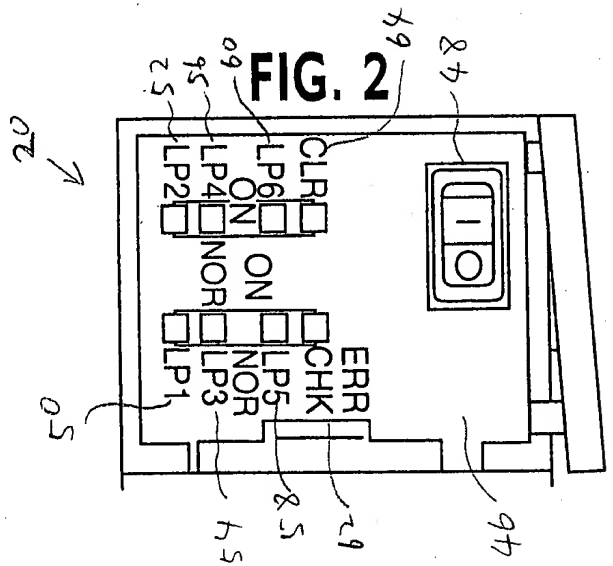

24
26
28
30
38
32
34
DTE PORT
SD
RD
RECEIVER
DRIVER
DTE CONTROL MODULE
SD
RD
MODULATION MODULE
DEMODULATION MODULE
LOOP CIRCUIT
ANALOG LINE INTERFACE
LINE
22
DEVICE CONTROL MODULE (FIRMWARE)
HARDWARE SETTINGS TERMINAL(OPERATING CONDITIONS SETTINGS)
42
OPERATION/DISPLAY MODULE
44
44a
20
38
40
DATA TRANSMISSION DEVICE BLOCK DIAGRAM
:CONTROL FLOW
:DATA FLOW

FIG. 2


20
25
95
09
49
84
LP2
LP4
LP6
CLR
ON
NOR
ON
LP1
LP3
LP5
NOR
CHK
ERR
05
45
85
29
94

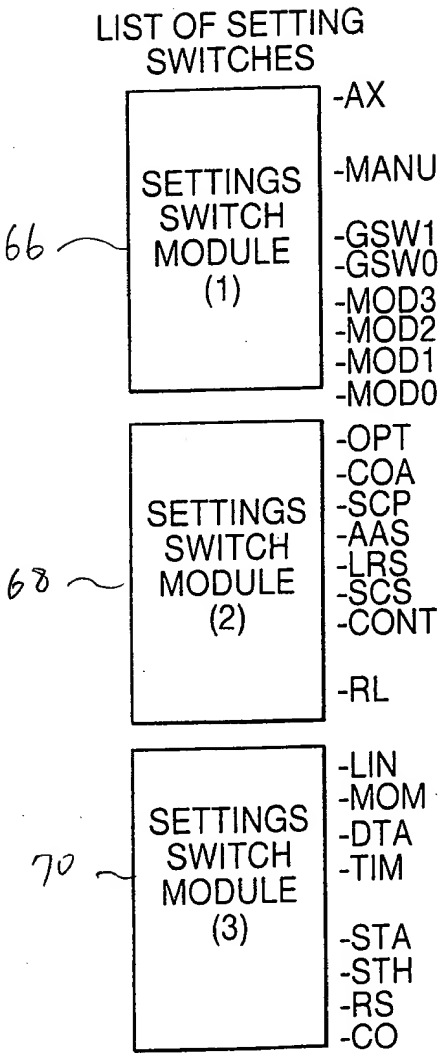


FIG. 3

:73AX2A MODE/73AX2 MODE/73AX MODE SWITCH (COMBINED WITH CORE BOARD SETTINGS)
:SETTING FOR CHECK OF RECEIVED LEVEL MANUAL ADJUSTMENTS
: } RECEIVED LEVEL RANGE SETTINGS
:
: } DTE-SIDE TRANSMISSION SPEED SETTINGS
:
:DTE INTERFACE SETTINGS
:NOT IN USE
:NOT IN USE
:NOT IN USE
:NOT IN USE
:CS DELAY TIME IN RELATION TO RS
:SETTINGS TO CHECK FOR CONTINUOUS TESTING DURING COUNTER RETURN TEST
:SETTINGS TO CHECK FOR COUNTER RETURN TEST FUNCTION
: } DATA TRANSMISSION CLOCK SOURCE SETTINGS
:
:ORIGINATION STATION MODEM SEND SIGNAL TIMING SETTINGS
:STI/TANDEM OPERATION SETTINGS
:NOT IN USE
:NOT IN USE
:CARRIER DETECTION

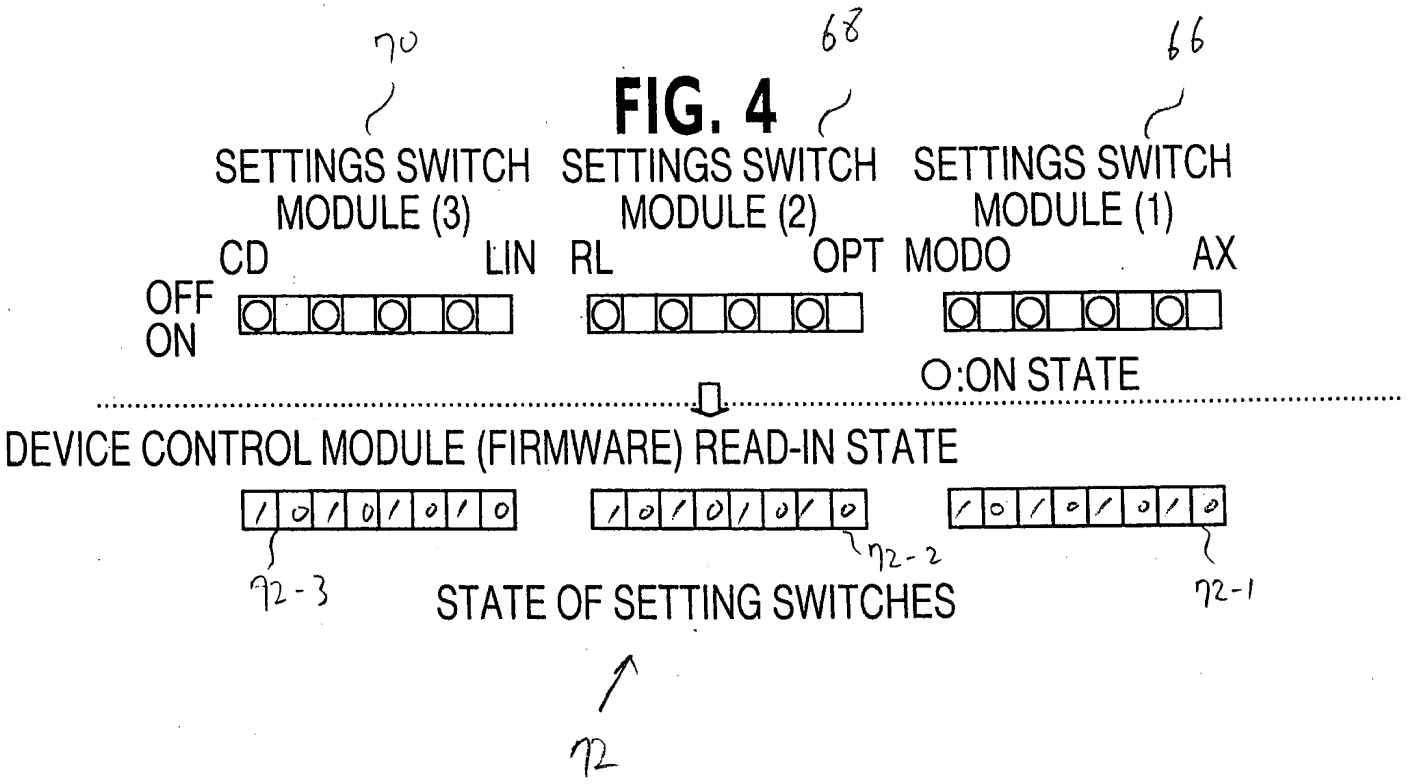


FIG. 4

Fig 5A

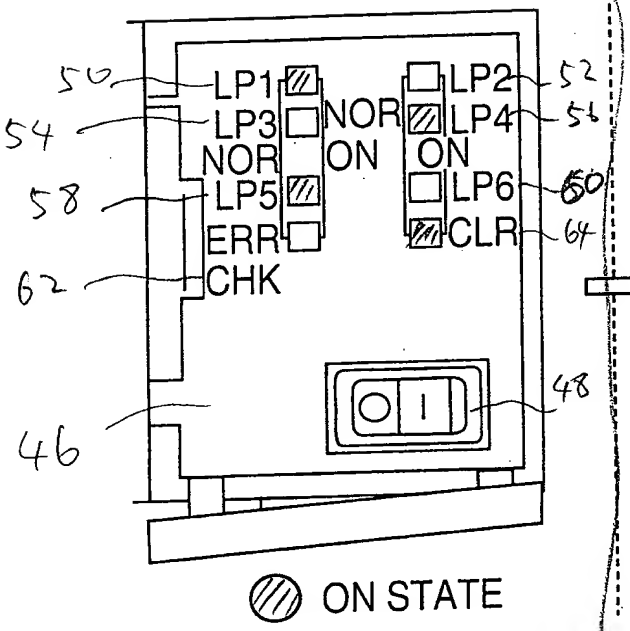
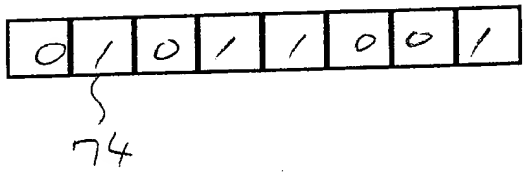


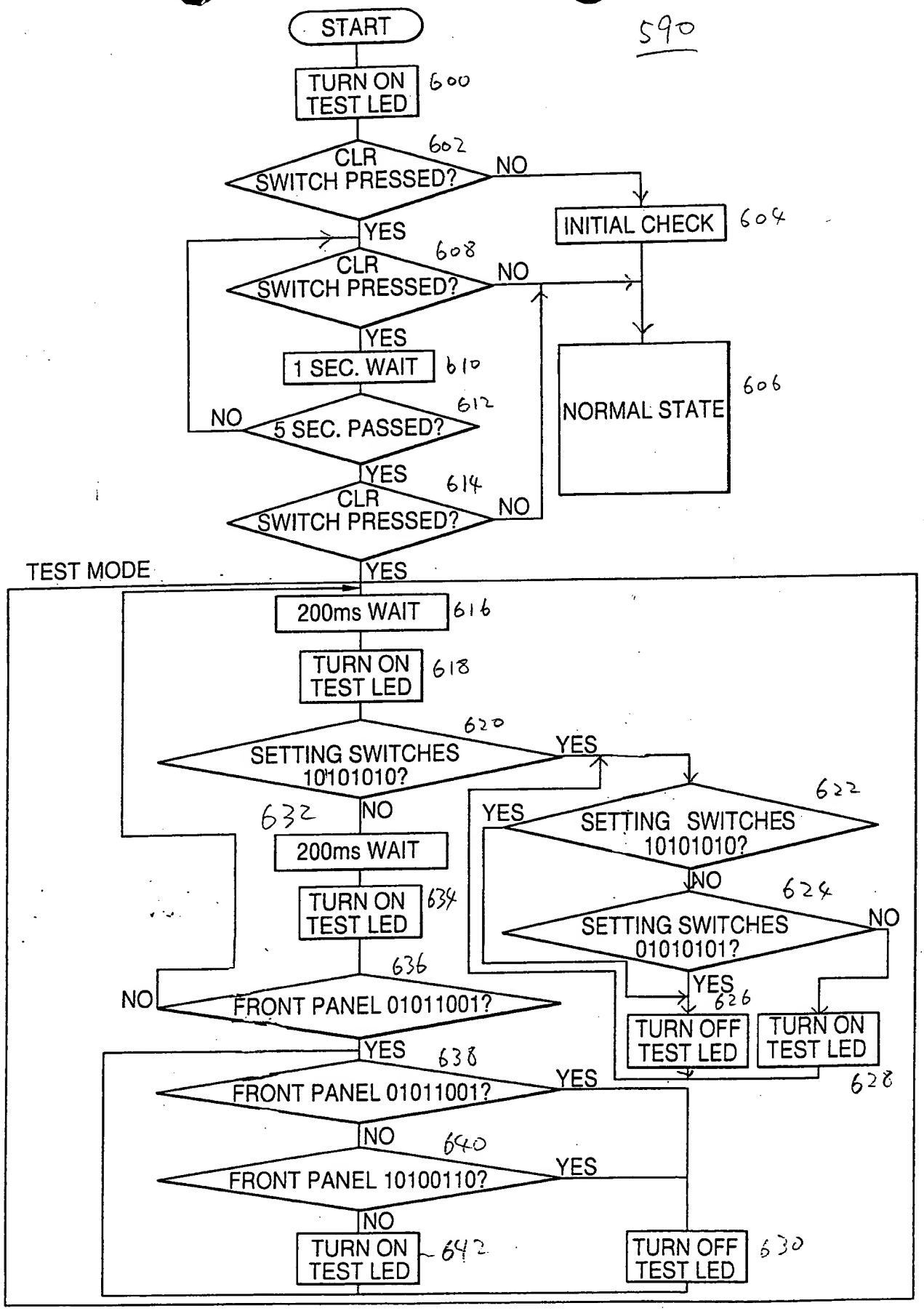
Fig. 5B

DEVICE CONTROL MODULE (FIRMWARE)
READ-IN STATE



STATE OF FRONT PANEL SWITCHES

FIG. 6


590
START
TURN ON TEST LED
600
CLR SWITCH PRESSED?
602
NO
INITIAL CHECK
604
YES
CLR SWITCH PRESSED?
608
NO
YES
1 SEC. WAIT
610
NORMAL STATE
606
NO
5 SEC. PASSED?
612
YES
CLR SWITCH PRESSED?
614
NO
YES
TEST MODE
200ms WAIT
616
TURN ON TEST LED
618
SETTING SWITCHES 10101010?
620
YES
NO
632
200ms WAIT
TURN ON TEST LED
634
YES
SETTING SWITCHES 10101010?
622
NO
SETTING SWITCHES 01010101?
624
NO
YES
626
TURN OFF TEST LED
TURN ON TEST LED
628
636
NO
FRONT PANEL 01011001?
YES
638
FRONT PANEL 01011001?
YES
NO
640
FRONT PANEL 10100110?
YES
NO
TURN ON TEST LED
642
TURN OFF TEST LED
630

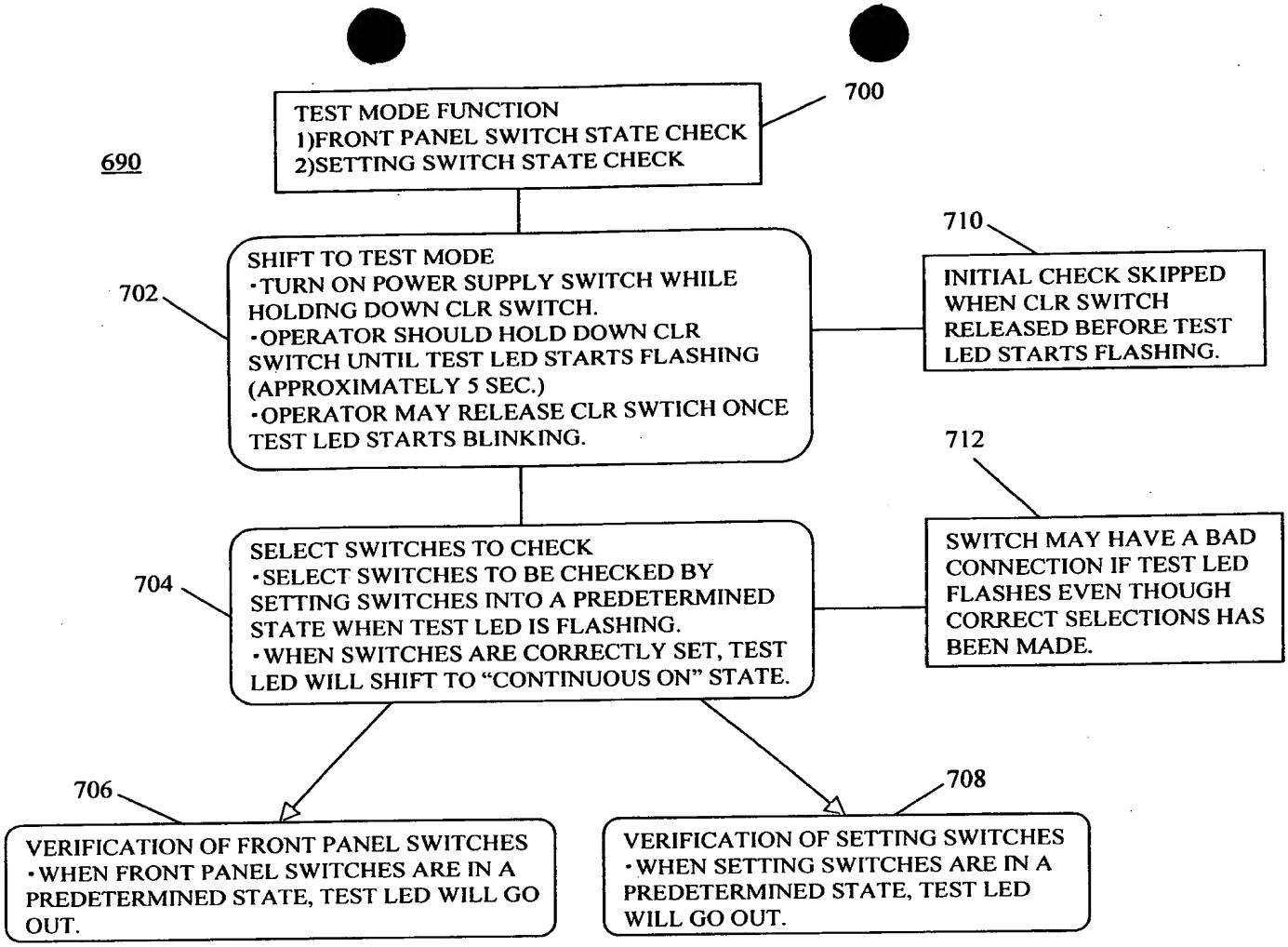
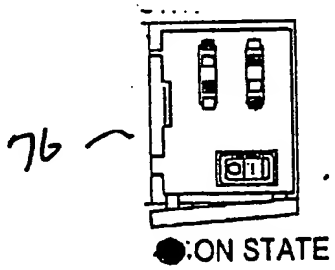
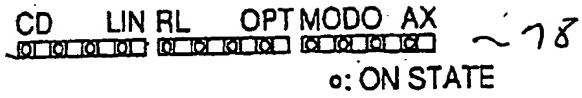
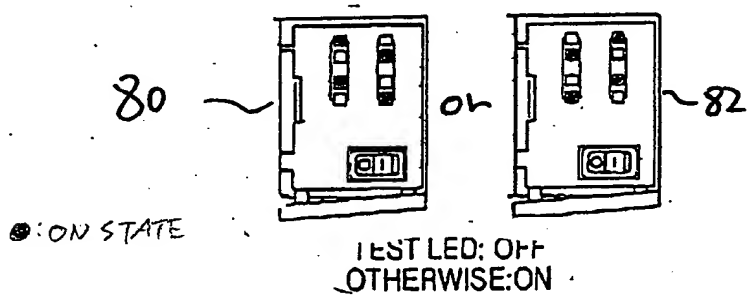

690
TEST MODE FUNCTION
1)FRONT PANEL SWITCH STATE CHECK
2)SETTING SWITCH STATE CHECK
700
SHIFT TO TEST MODE
・TURN ON POWER SUPPLY SWITCH WHILE HOLDING DOWN CLR SWITCH.
・OPERATOR SHOULD HOLD DOWN CLR SWITCH UNTIL TEST LED STARTS FLASHING (APPROXIMATELY 5 SEC.)
・OPERATOR MAY RELEASE CLR SWTICH ONCE TEST LED STARTS BLINKING.
702
710
INITIAL CHECK SKIPPED WHEN CLR SWITCH RELEASED BEFORE TEST LED STARTS FLASHING.
SELECT SWITCHES TO CHECK
・SELECT SWITCHES TO BE CHECKED BY SETTING SWITCHES INTO A PREDETERMINED STATE WHEN TEST LED IS FLASHING.
・WHEN SWITCHES ARE CORRECTLY SET, TEST LED WILL SHIFT TO "CONTINUOUS ON" STATE.
704
712
SWITCH MAY HAVE A BAD CONNECTION IF TEST LED FLASHES EVEN THOUGH CORRECT SELECTIONS HAS BEEN MADE.
706
VERIFICATION OF FRONT PANEL SWITCHES
・WHEN FRONT PANEL SWITCHES ARE IN A PREDETERMINED STATE, TEST LED WILL GO OUT.
708
VERIFICATION OF SETTING SWITCHES
・WHEN SETTING SWITCHES ARE IN A PREDETERMINED STATE, TEST LED WILL GO OUT.

Fig.7A


76
ON
●:ON STATE


CD LIN RL OPT MODO AX
78
o: ON STATE


80
or
82
●:ON STATE
TEST LED: OFF
OTHERWISE:ON

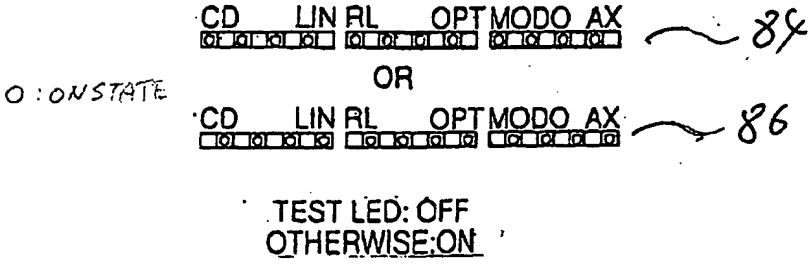

CD LIN RL OPT MODO AX
84
OR
O:ONSTATE
CD LIN RL OPT MODO AX
86
TEST LED: OFF
OTHERWISE:ON

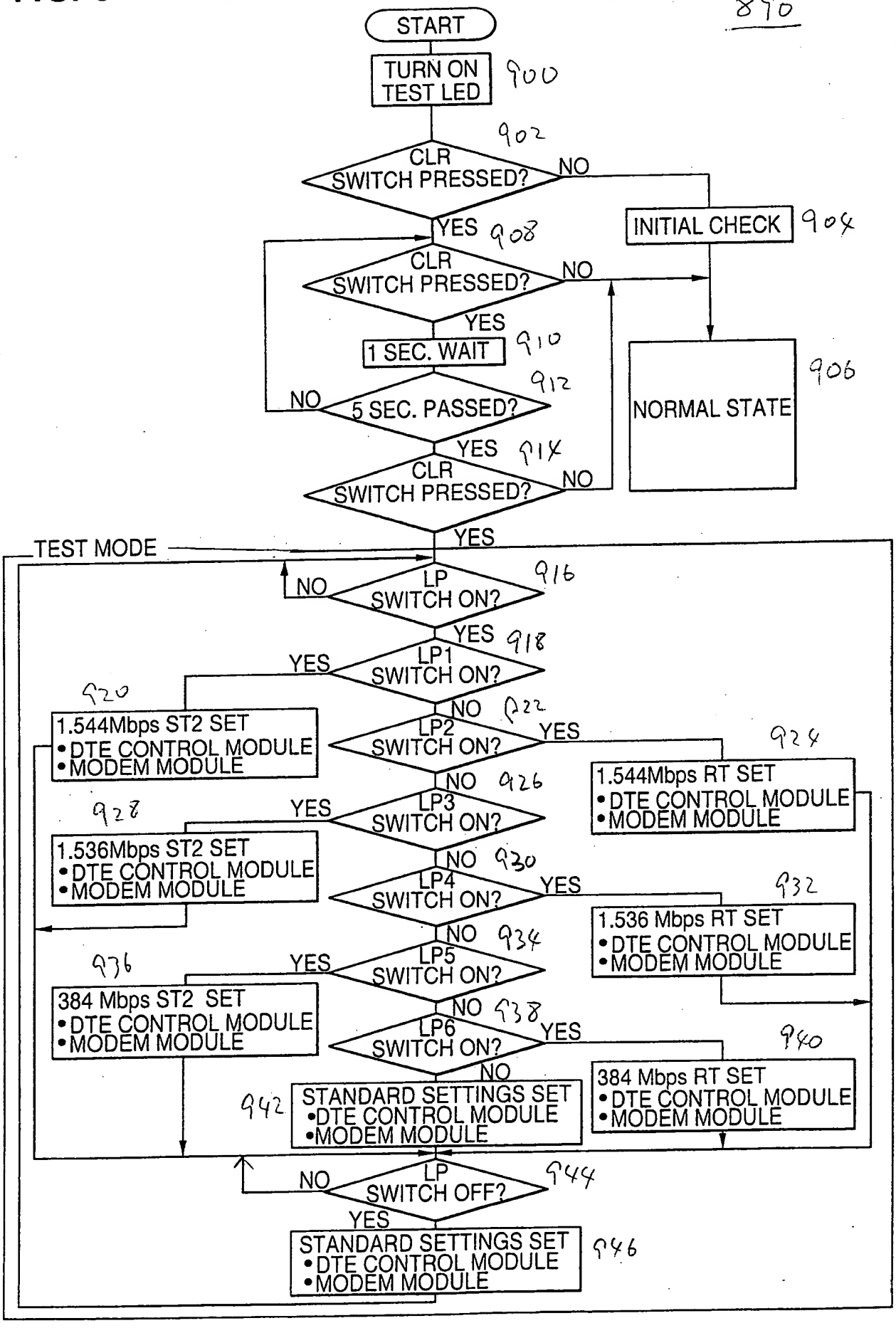
Fig 7B

FIG. 8

800

ORIGINATION STATION		DESTINATION STATION	
SWITCH	OPERATING CONDITIONS	OPERATING CONDITIONS	SWITCH
LP1	1.544 Mbps ST2	1.544 Mbps RT	LP2
LP3	1.536 Mbps ST2	1.536 Mbps RT	LP4
LP5	384 kbps ST2	384 kbps RT	LP6

FIG. 9


890
START
TURN ON TEST LED
900
902
CLR SWITCH PRESSED?
NO
YES
908
INITIAL CHECK
904
CLR SWITCH PRESSED?
NO
YES
1 SEC. WAIT
910
912
NO
5 SEC. PASSED?
YES
914
CLR SWITCH PRESSED?
NO
YES
NORMAL STATE
906
TEST MODE
NO
LP SWITCH ON?
916
YES
LP1 SWITCH ON?
918
YES
920
1.544Mbps ST2 SET
• DTE CONTROL MODULE
• MODEM MODULE
NO
922
LP2 SWITCH ON?
YES
924
1.544Mbps RT SET
• DTE CONTROL MODULE
• MODEM MODULE
NO
926
LP3 SWITCH ON?
YES
928
1.536Mbps ST2 SET
• DTE CONTROL MODULE
• MODEM MODULE
NO
930
LP4 SWITCH ON?
YES
932
1.536 Mbps RT SET
• DTE CONTROL MODULE
• MODEM MODULE
NO
934
LP5 SWITCH ON?
YES
936
384 Mbps ST2 SET
• DTE CONTROL MODULE
• MODEM MODULE
NO
938
LP6 SWITCH ON?
YES
940
384 Mbps RT SET
• DTE CONTROL MODULE
• MODEM MODULE
NO
942
STANDARD SETTINGS SET
• DTE CONTROL MODULE
• MODEM MODULE
NO
LP SWITCH OFF?
944
YES
STANDARD SETTINGS SET
• DTE CONTROL MODULE
• MODEM MODULE
946

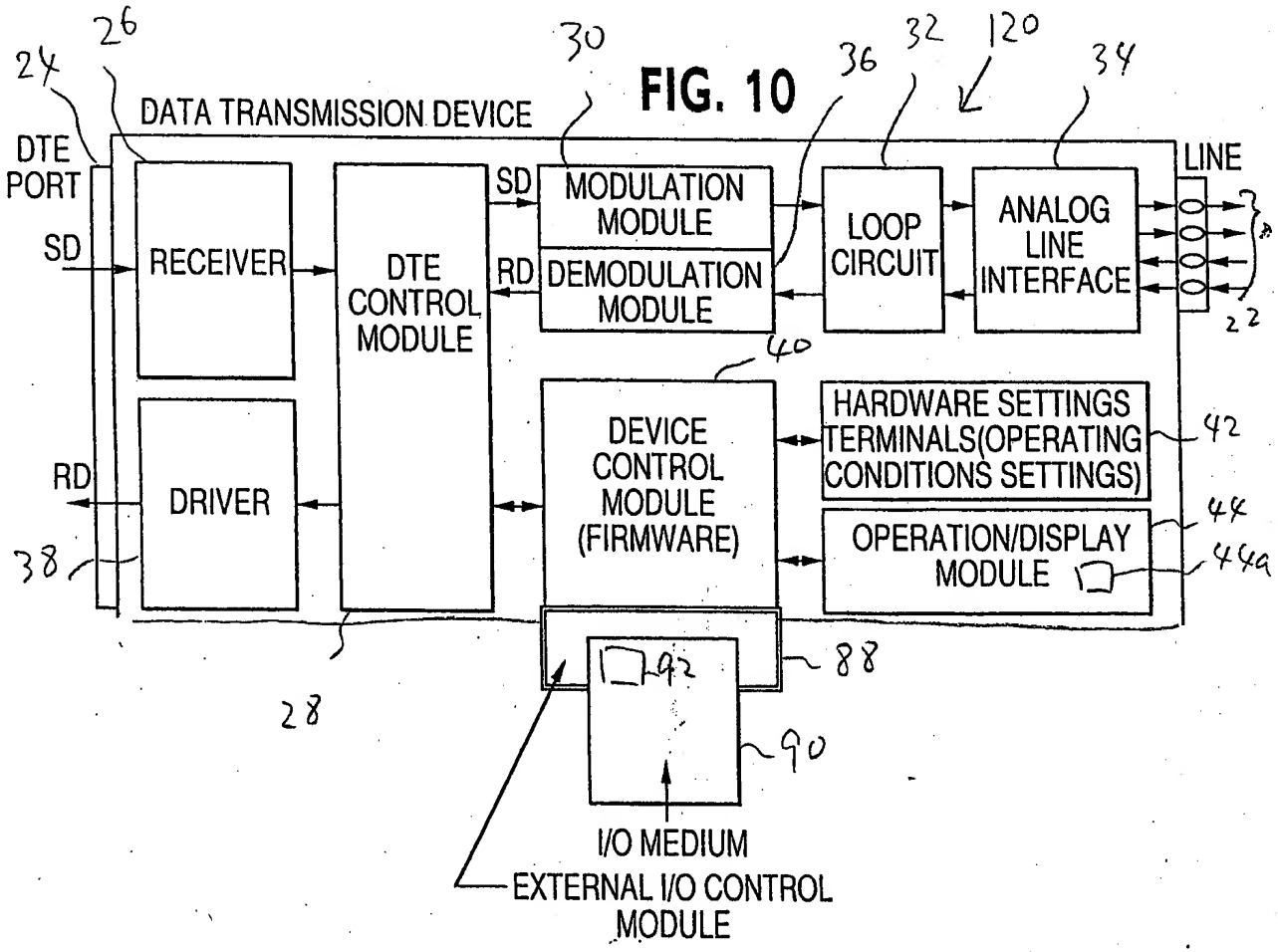


FIG. 10

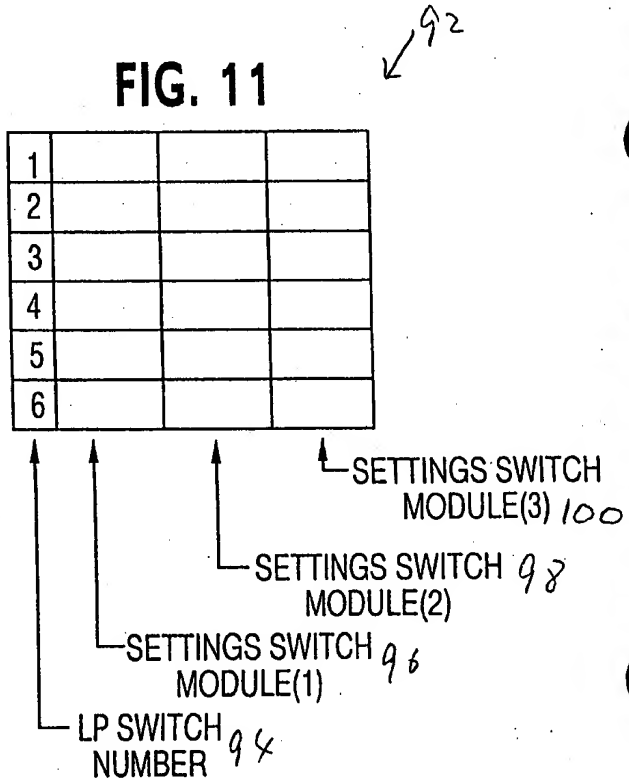


FIG. 11

FIG. 12

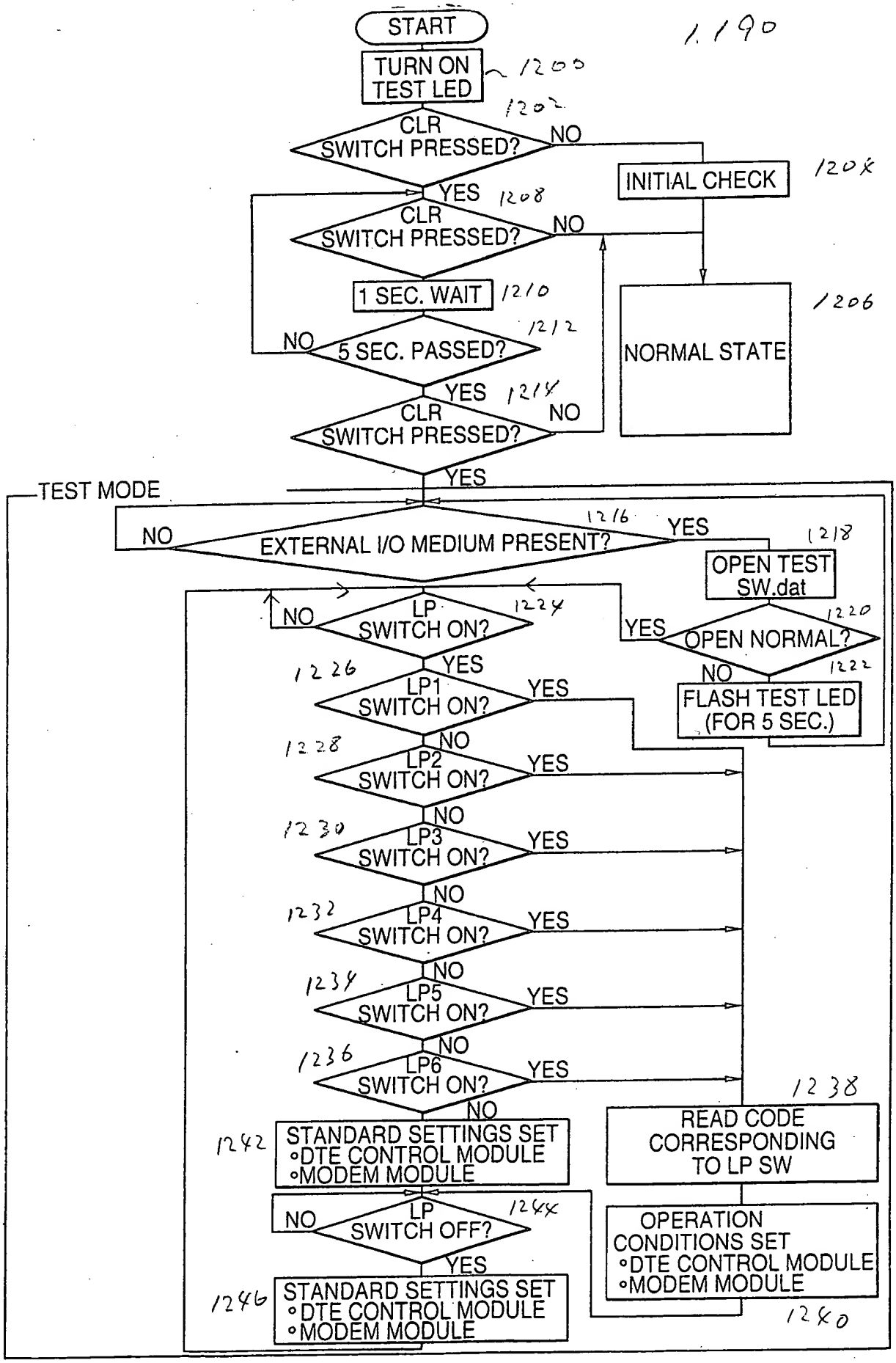

1190
START
TURN ON TEST LED
1200
CLR SWITCH PRESSED?
1202
NO
INITIAL CHECK
120X
YES
1208
CLR SWITCH PRESSED?
NO
1 SEC. WAIT
1210
5 SEC. PASSED?
1212
NO
YES
CLR SWITCH PRESSED?
1214
NO
NORMAL STATE
1206
YES
TEST MODE
EXTERNAL I/O MEDIUM PRESENT?
1216
NO
YES
1218
OPEN TEST SW.dat
OPEN NORMAL?
1220
YES
NO
1222
FLASH TEST LED (FOR 5 SEC.)
LP SWITCH ON?
1224
NO
YES
LP1 SWITCH ON?
1226
YES
NO
LP2 SWITCH ON?
1228
YES
NO
LP3 SWITCH ON?
1230
YES
NO
LP4 SWITCH ON?
1232
YES
NO
LP5 SWITCH ON?
1234
YES
NO
LP6 SWITCH ON?
1236
YES
NO
1238
READ CODE CORRESPONDING TO LP SW
OPERATION CONDITIONS SET
•DTE CONTROL MODULE
•MODEM MODULE
1240
STANDARD SETTINGS SET
•DTE CONTROL MODULE
•MODEM MODULE
1242
LP SWITCH OFF?
124X
NO
YES
STANDARD SETTINGS SET
•DTE CONTROL MODULE
•MODEM MODULE
1246

FIG 13A

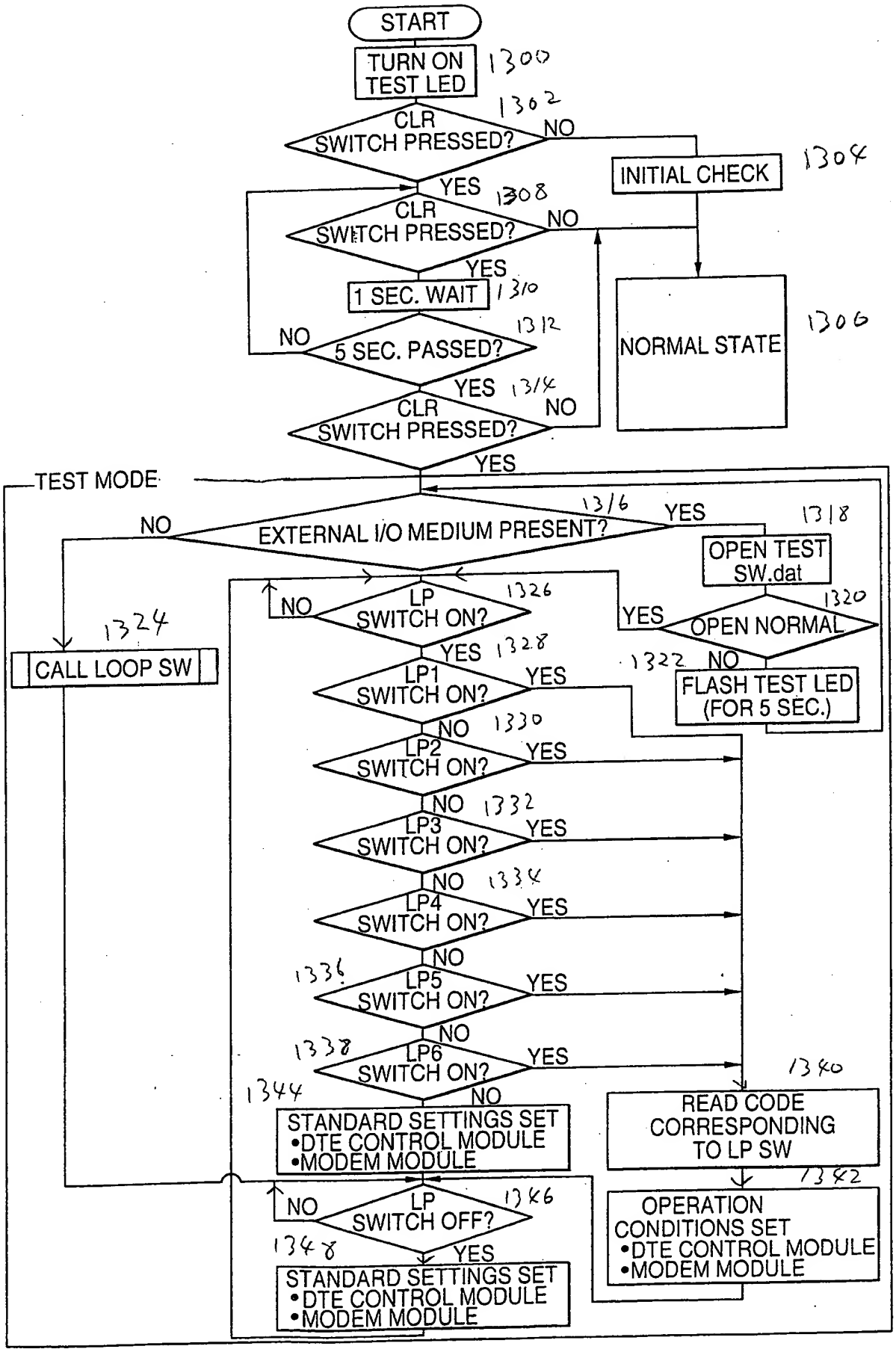
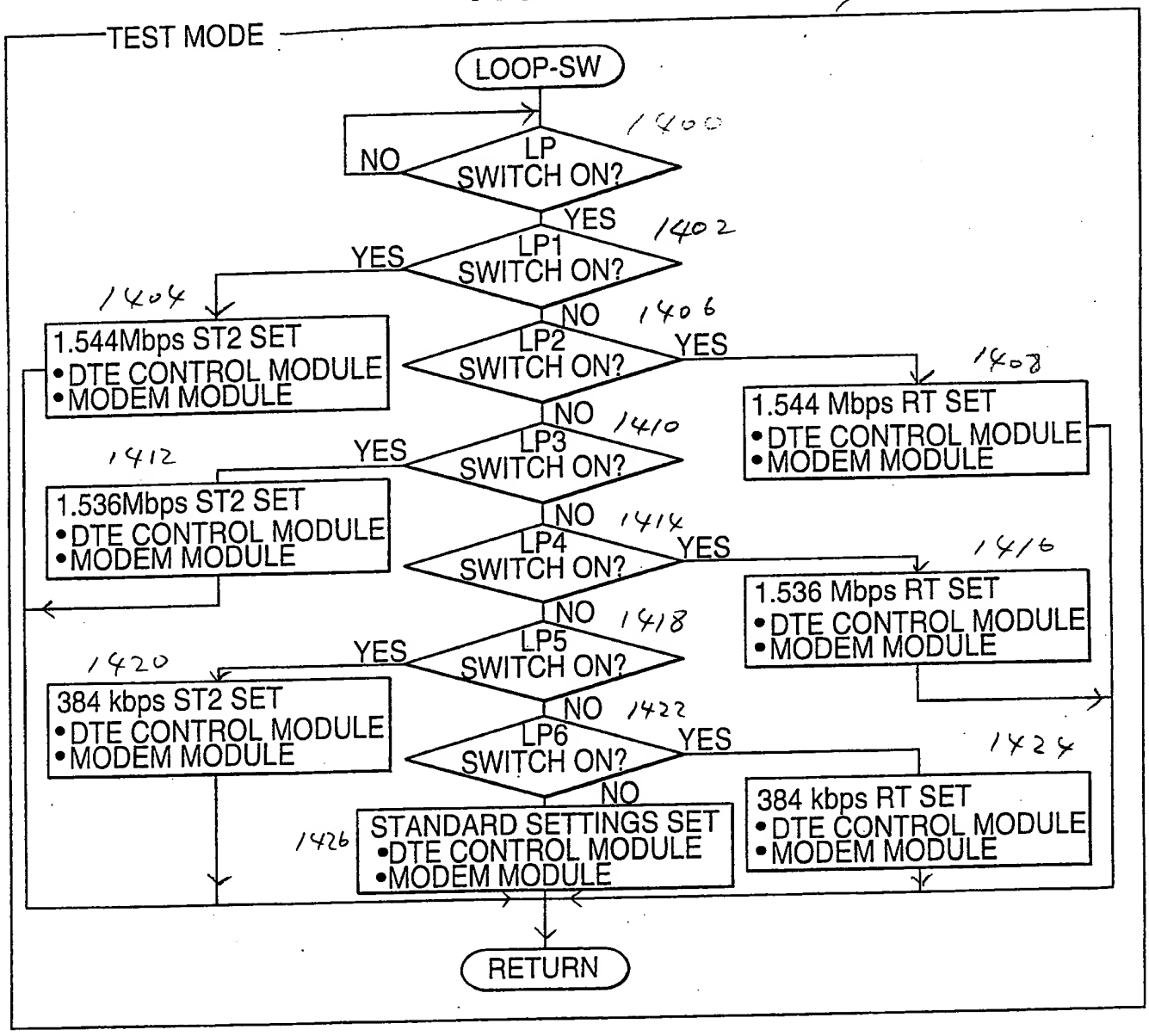

START
TURN ON TEST LED
1300
CLR SWITCH PRESSED?
1302
NO
YES
INITIAL CHECK
1304
CLR SWITCH PRESSED?
1308
NO
YES
1 SEC. WAIT
1310
5 SEC. PASSED?
1312
NO
YES
CLR SWITCH PRESSED?
1314
NO
YES
NORMAL STATE
1306
TEST MODE
EXTERNAL I/O MEDIUM PRESENT?
1316
NO
YES
1318
OPEN TEST SW.dat
OPEN NORMAL
1320
YES
NO
1322
FLASH TEST LED (FOR 5 SEC.)
CALL LOOP SW
1324
LP SWITCH ON?
1326
NO
YES
LP1 SWITCH ON?
1328
YES
NO
LP2 SWITCH ON?
1330
YES
NO
LP3 SWITCH ON?
1332
YES
NO
LP4 SWITCH ON?
1334
YES
NO
LP5 SWITCH ON?
1336
YES
NO
LP6 SWITCH ON?
1338
YES
NO
1340
READ CODE CORRESPONDING TO LP SW
1342
OPERATION CONDITIONS SET
•DTE CONTROL MODULE
•MODEM MODULE
1344
STANDARD SETTINGS SET
•DTE CONTROL MODULE
•MODEM MODULE
LP SWITCH OFF?
1346
NO
1348
YES
STANDARD SETTINGS SET
•DTE CONTROL MODULE
•MODEM MODULE

FIG. 13B


TEST MODE
LOOP-SW
1400
LP SWITCH ON?
NO
YES
1402
LP1 SWITCH ON?
YES
1404
1.544Mbps ST2 SET
•DTE CONTROL MODULE
•MODEM MODULE
NO
1406
LP2 SWITCH ON?
YES
1408
1.544 Mbps RT SET
•DTE CONTROL MODULE
•MODEM MODULE
NO
1410
LP3 SWITCH ON?
YES
1412
1.536Mbps ST2 SET
•DTE CONTROL MODULE
•MODEM MODULE
NO
1414
LP4 SWITCH ON?
YES
1416
1.536 Mbps RT SET
•DTE CONTROL MODULE
•MODEM MODULE
NO
1418
LP5 SWITCH ON?
YES
1420
384 kbps ST2 SET
•DTE CONTROL MODULE
•MODEM MODULE
NO
1422
LP6 SWITCH ON?
YES
1424
384 kbps RT SET
•DTE CONTROL MODULE
•MODEM MODULE
NO
1426
STANDARD SETTINGS SET
•DTE CONTROL MODULE
•MODEM MODULE
RETURN